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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|------------------------|------------------------|-----------------------------|
| 09/364,727 | 07/30/1999 | STEPHEN L. SCARINGELLA | E0295/7126WR | 9805 |
| 7590 | 03/26/2004 | | EXAMINER [REDACTED] | VO, TIM T |
| WILLIAM R MCCLELLAN WOLF GREENFIELD & SACKS 600 ATLANTIC AVENUE BOSTON, MA 02210 | | | ART UNIT [REDACTED] | PAPER NUMBER 2112 102 |

DATE MAILED: 03/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | |
|------------------------------|-----------------|--------------------|
| Office Action Summary | Application No. | Applicant(s) |
| | 09/364,727 | SCARINGELLA ET AL. |
| Examiner | Art Unit | |
| Tim T. Vo | 2112 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 24 December 2003.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-14 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ . |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ . | 6) <input type="checkbox"/> Other: _____ . |

DETAILED ACTION

Notice to Applicant(s)

This application has been examined. Claims 1-14 are pending.

Response to Arguments

1. In view of the appeal brief filed on 12/24/03, PROSECUTION IS HEREBY REOPENED. New ground of rejection is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-6 and 12-14 are rejected under 35 U.S.C. § 102(e) as being anticipated by Nakamatsu et al. patent number 6,473,822 referred hereinafter "Nakamatsu".

As for claims 1 and 12, Nakamatsu teaches a method and an apparatus comprising:

a plurality of circuit boards (see figures 2, 9 and column 4 lines 33-35, wherein each expansion circuit board 54 is inserted to the slots 19), each having electronic circuitry including a non-volatile memory containing product data that identifies the respective circuit board (see figure 9, expansion board 54 and column 49-52 and column 9 lines 9-28, wherein each expansion circuit board 54 containing a ROM for storing identification information which is characteristic of the board) and means for reading the product data in the non-volatile memory (see column 9 lines 9-28, wherein the CPU 3 reads the identification information stored in the ROM of the expansion circuit board 54 to identify the characteristics of the expansion circuit board 54); and a backplane for mounting and interconnecting the circuit boards (see figure 3 and column 5 lines 9-24, wherein each expansion circuit board 54 is mounted on the backplane bus 31).

As for claims 2-4 and 14, Nakamatsu teaches the non-volatile memory comprises read only memory, EEPROM (see column 9 line 15, Nakamatsu teaches the ROM thus any semiconductor serving as a memory that contains instructions or data that can be read but not modified a programming process, as in PROM and EEPROM).

As for claim 5, Nakamatsu teaches each of the circuit boards further comprises means for providing external access to the product data in the non-volatile memory through the backplane (see figure 9 and column 9 lines 9-28, wherein each expansion circuit board 54 contains ROM for storing identification information).

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As for claims 6 and 13, Nakamatsu teaches wherein each product data includes one or more of a board part number, a board serial number, a board revision level, a cabinet serial number and text comments (see column 8 lines 40-52).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 7-11 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Tobita et al. patent number 5,530,673 referred hereinafter "Tobita" in view of Nakamatsu.

As for claims 7 and 10-11, Tobita teaches a computer storage system comprising:

an array of storage devices (see figure 87, Flash memory array 4031-4033);
a system cache memory (see figure 87, Cache memory 4003);
a plurality of controller boards for controlling data transfer to and between the array of storage devices (see figure 97 and column 1 lines 38-59, control circuit 4104, wherein figure 97 is a schematic diagram of each flash memory device, wherein each flash memory contains a control circuit for controlling data transfer. This flash memory device is equivalent to each flash memory device from figure 87).

Tobia does not expressly teach storing product data of the processor board on the memory. However, Nakamatsu teaches a ROM from an expansion card containing

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identification information, which characterizes the expansion card (see column 8 lines 50-52 and column 9 lines 9-28). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Tobia's invention to include product data on the expansion cards such as flash memory card so each expansion card has the flexibility for positioning in any expansion slot in the computer system without being preconfiguration is required (see column 10 lines 30-32 of Nakamatsu).

As for claims 8-9, Tobia teaches non-volatile memory comprises ROM, EEPROM (see figure 87, flash memory 4031-4033 and column 3 lines 8-11).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tim T. Vo whose telephone number is 703-308-5862. The examiner can normally be reached on 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Rinehart can be reached on 703-305-4815. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-2100.



Tim T. Vo
Primary Examiner
Art Unit 2112